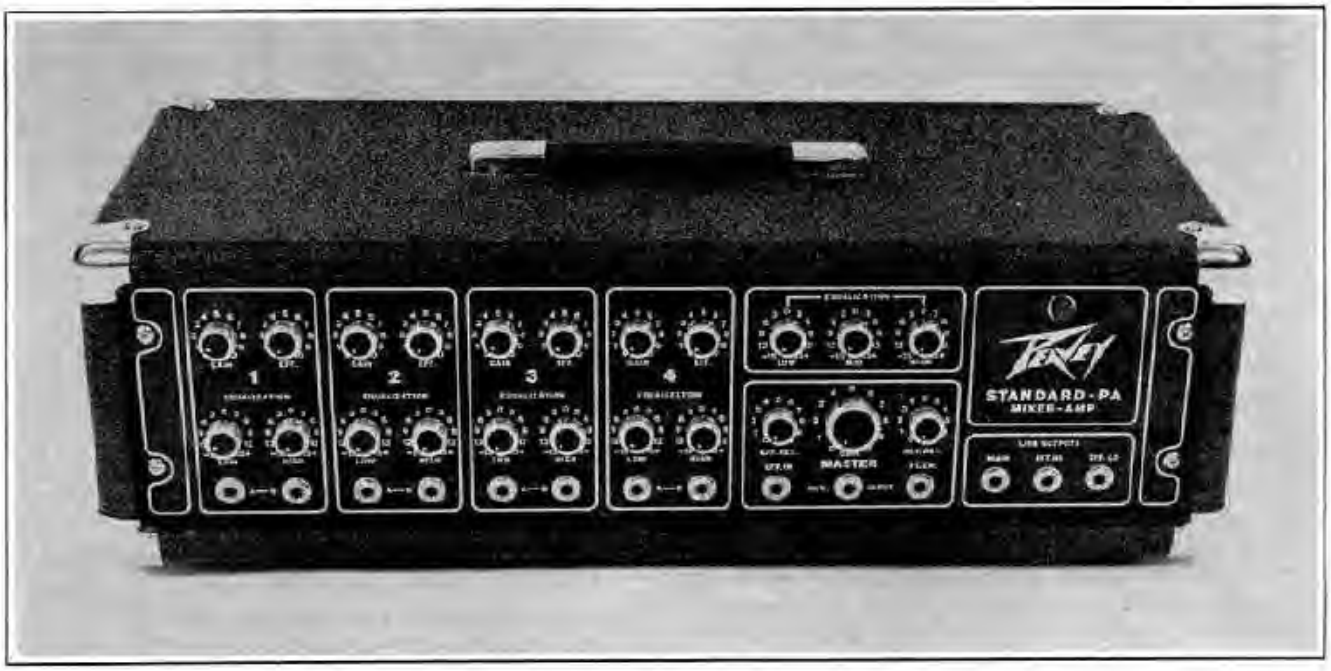
STANDARD PA
MIXER-AMP
OWNER'S MANUAL



POWER AMPLIFICATION SECTION: 260H MODULE

Output Power @ 1 kHz @ 117 VAC Line:

1. Rated Power: 130 W RMS @ Rated Load: 4 Ohms
2. Power vs. Load

LOAD IMPEDANCE	8	4	2	OHMS
OUTPUT @ 1 % THD	90	140	80	W

IM Distortion: Less than 0.3 % from 0.5 Watt to 100 Watts, typically 0.1 %
THD: Less than 0.1 % from 0.5 Watt to 100 watts from 20 Hz – 10 kHz, typically .05 %
Frequency Response: ±1 dB, 20 Hz – 20 kHz @ 1 W, 4 Ohms
Sensitivity @ Rated Power & Load: 700 mV
Input Impedance: 15 k Ohms

PRE-AMPLIFIER SECTION:

Input Characteristics: (Tone Controls Flat, Volume @ Maximum, Master @ 12:00)

1. Sensitivity: 4 mV @ 1 kHz
2. Input Impedance: 100 k Ohms Unbalanced
3. Noise: 56 dB (Open Circuit), 60 dB (50 k Ohms), 66 dB (Short Circuit)

Distortion @ 1 kHz @ Rated Output: Less than 0.1 % THD
Frequency Response: 3 dB Down @ 40 Hz & 20 kHz
Tone Controls: ±15 dB @ 50 Hz and 5 kHz
Effects Send Control: Continuously variable each channel

MASTER SECTION:

Tone Controls: ±15 dB @ 50 Hz, 800 Hz, 10 kHz
Reverb Return Control: Continously variable with footswitch cut-off
Main Output Level: 2.0 V RMS into 10 k Ohms
Effect Output Level: Effects High, 1.0 V RMS into 10 k Ohms;
Effects Low, 0.25 V RMS into 10 k Ohms

Your Standard PA Mixer/Amplifier is the result of our constant research program and the features designed into this unit are those found necessary in our previous experience with actual "on the job" requirements. Every necessary feature is included on this unit and no non-functional switches and controls have been added. **The Standard PA is a professional mixer/amplifier capable of handling most medium sized areas with power to spare, with adequate facilities to control tonality and feedback with a minimum of effort.** The 130 Watt R.M.S. power amplifier is powerful enough to drive most speaker systems and is constructed for extremely heavy duty operation using four output transistors instead of the more common pair of outputs. Because we have added more ruggedness to the output stage, the flexibility of the amplifier is greatly increased by providing a wider range of load impedances which can be used with no ill effect on the amp. The input stages of the unit have separate low and high EQ controls for better tone control, as well as a control for continuously varying the amount of reverb. This variable control is much better than the common on/off switch since it allows incremental reverb/effects mixing instead of on or off switches. Master controls have been included to facilitate tonal and volume balance of the overall sound of your PA system. Field experience has shown that these master controls are absolutely necessary in producing a balanced professional sound. The master section of your Standard PA contains complete three-band master equalization, as well as adequate input and output facilities to allow use of the Standard PA with a wide range of auxiliary equipment.

The **gain control** serves to vary the gain of the preamp. The preamps of the new Standard are of the variable feedback type which allows lowest noise and maximum performance.

The **effects send control** enables the operator to determine the amount of signal from the respective channels mixed into the effects/reverb mixing buss. These controls determine the overall mix as well as the output levels delivered to the effects outputs as well as to the reverb drive amplifier.

The **low equalization control** determines the low frequency response of the individual channel. The Standard low control is a type of electronic crossover which acts as a volume control for the low frequencies. Because of the design of this control, it is possible to obtain both low boost and cut. The vertical position (0) will yield a flat response. Clockwise operation results in a boost and counter-clockwise operation results in a cut.

The **high equalization control** determines the high frequency response of the individual channel. The high control is part of an electronic crossover and functions as a volume control for the high frequencies. The vertical position (0) yields flat response, while clockwise settings boost highs and counter-clockwise settings yield a high cut.

Each channel of the Standard PA is equipped with two inputs jacks which are connected in a unique circuit that allows a wide range of inputs to be handled. When only one microphone is used, the **"A" input jack** is more sensitive than the **"B" input jack.** This high and low gain feature enables optimum microphone matching. If a high output microphone is overloading the sensitive "A" input, simply reconnect this mike into the low gain "B" jack. When two inputs are used in each channel, the input circuit automatically balances to equalize the gain in both A and B jacks. This simple, but effective, switching system gives the user much greater flexibility in choice of input sensitivities and overload protection.

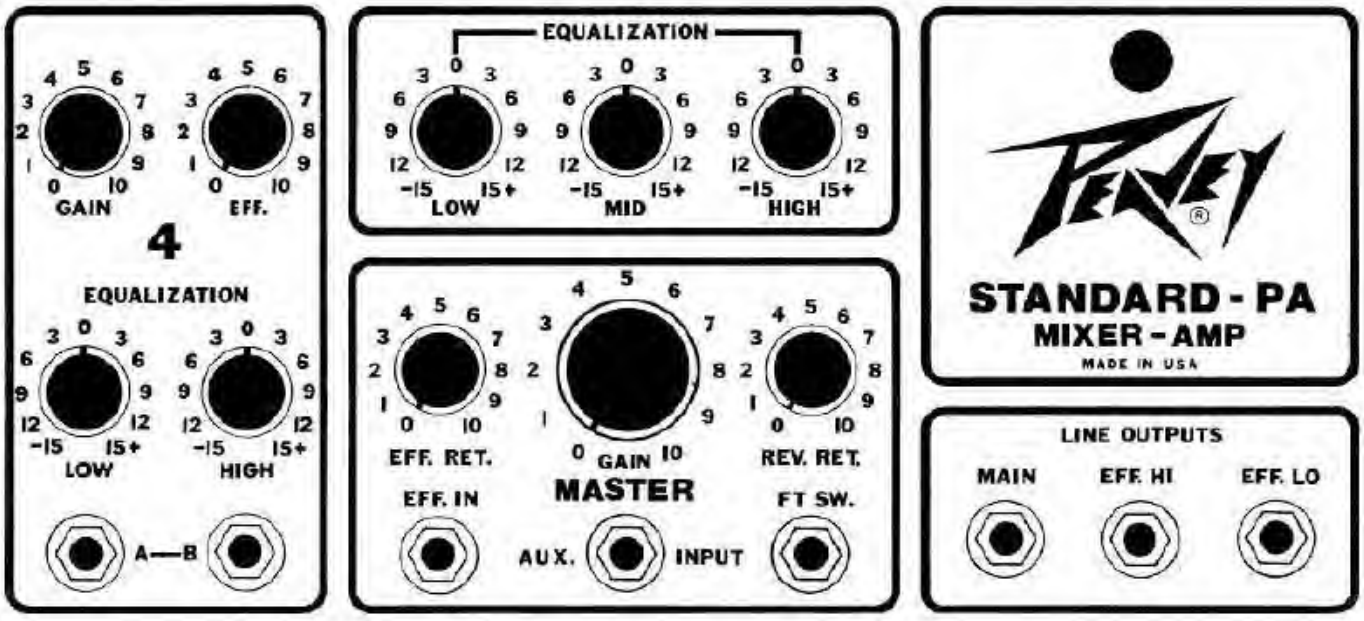
MASTER SECTION

Field experience has proven that a professional PA Mixer/Amplifier must be equipped with a full set of master controls. The Gain and Equalization controls on the individual channels enable the operator to get a reasonable mix, the master controls allow a much easier overall balance.

The Standard PA features three-band master equalization as well as an auxiliary input for patching in echo/effects units or an additional mic input. Output facilities are provided from the main output buss, as well as both high and low level outputs from the effects buss.

The **master low control** is part of an electronic crossover and acts as an overall level control for all bass frequencies. The action of this control is similar to the low controls on the individual channels.

The **master middle control** seems to give best results in the flat or cut position (+ 0 to - 15) for most applications. The effect of operating the middle control in the cut position is to give the extremes of bass and treble a boost relative to the mid-range fre-



quencies. Operation in this mode yields a very crisp and articulate sounding system.

The **master high equalization control** determines the overall level of the treble frequencies, and its operation is similar to the indivdual channel high controls.

The **effects return control** determines the gain of the additional channel provided in the Standard PA to facilitate use of an additional microphone or external echo/effects unit. This control operates in conjunction with the effects input jack and feeds the main mix buss. This effects return feature may be considered as an additional unequalized input channel.

The **effects input** jack is the input to the effects channel and operates in conjunction with the effects return level control.

The **master volume control** controls the gain of the master mixer by use of variable negative feedback. The use of active mixing allows your Standard PA Mixer/Amplifier to perform as well as many studio mixing consoles. This method is the same used on the latest recording mixers and yields the lowest distortion and noise of any other method. The master volume sets the level for the entire system and is set apart from the other controls by the size of its control knob. The master volume should be set approximately in the middle position (4-6), and fine adjustment in volume should be made with the individual controls on each channel.

The **auxiliary input** provides an additional line level [1.0 V R.M.S. @ 10 k Ohms) input to the main mixing buss to enable other mixers or auxiliary equipment to be patched into the main mix buss.

The **reverb footswitch jack** provides a method for reverb cut off by use of the optional remote footswitch. Any footswitch with the proper plug (standard phone plug) and a shielded cable will work with this jack.

The **reverb return control** determines the amount of delayed signal from the internal reverb unit that is mixed back into the main mixing buss. Keep in mind that channel effect controls must be mixing sound signal into the effects/reverb buss for the reverb circuit to function. If it should be desirable to disable the reverb circuit in order to use the effects buss for other (monitor, echo, etc.), the reverb may be elimated by use of the footswitch, or by turning the reverb return control fully counter-clockwise.

The **main output** is the jack provided to deliver signal from the main mixing amplifier to other mixers, power amplifiers, tape recorders, etc. This output is capable of 2.0 V R.M.S. @ 5 k Ohms output impedance.

The **effects high level** output is the output from the effects mix buss for driving external devices that require 1.5 V R.M.S. @ 10 k Ohms.

The **effects low level** output is the divided down signal derived from the effects mixing amp and is designed to supply mic level signals to auxiliary echo/effects units, etc. The effects low level output is approximately 0.10 V R.M.S. @ 50 k Ohms.

The **pilot light** indicates when power is applied to the amplifier.

The **fuse** is located within the cap of the fuse holder and should be replaced with one of the proper value if it should fail. It is necessary that the proper value fuse be used to avoid damage to the equipment and to avoid voiding the warranty. Models that have circuit breakers can be reset by depressing the red button. If the breaker trips repeatedly, take the unit to a qualified service center for inspection.

The **line power switch** is of the three position type with the center position being **off**. The three position switch has two **on** positions which are used to ground the amplifier properly. One of the on positions will yield the least hum or popping when the microphone is touched and this is the position that should be used.

The large **line cord retainers** on the rear panel are provided for your convenience in storing the AC line cord during transport of the unit.

The **three wire line cord** has been provided for your protection and should be connected to the proper line voltage as indicated on the back panel. **DO NOT REMOVE GROUND PIN ON PLUG.**

The **speaker output jacks** are designed to be used with a total load of **FOUR OHMS.** Speaker systems of higher impedance can be used with a slight loss in output power. Speaker systems with less than a total of Four Ohms can be used with the risk of overloading the power amplifier. Slightly less power will be delivered to lower impedances because of the unique limiting action of our integral protection system. The power amplifier is built on a large aluminum heatsink to cool the output devices. A thermostat is connected to this heatsink to shut the system down in case of overheating. Low speaker impedances tend to cause the amp to run hotter than normal, and could cause the automatic cutoff to operate if the output stage becomes hot enough to endanger the output devices. The thermostat is self-resetting and normal operation will be restored when the unit reaches safe operating temperatures. If thermal shutdown is apparent, then you are overloading the system and continued use in this manner will damage the system. Never use less than a **FOUR OHM** total load on the 260 module. The output voltage available from this unit is approximately 23 V R.M.S. into 4 Ohms with proper line input.

CAUTION

To avoid damage to your equipment or electrical shock when using your Standard PA with other consoles or effects units, all signal connections should be completed with shielded cable before power (mains) connection is made. The three wire power receptacles should be used if possible.

Printed in U S A
Part No. 80361027

PEAVEY ELECTRONICS CORP.
711 A Street, Meridian, Mississippi 39301 (601) 483-5365